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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/822,926 | 04/13/2004 | Paul C. Gillette | 10277 | 4443 |

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| EXAMINER | |
|---|---|
| WHITE, EVERETT NMN | |
| ART UNIT | PAPER NUMBER |
| 1623 | |
| MAIL DATE | DELIVERY MODE |
| 07/10/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/822,926 | GILLETTE ET AL. | |
| | Examiner | Art Unit | |
| | EVERETT WHITE | 1623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-103* is/are pending in the application.

4a) Of the above claim(s) *1-40,50,52-55 and 67-93* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *41-49,51,56-66 and 94-103* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. The amendment filed April 3, 2008 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

(A) Claims 97-103 have been added;
(B) Comments regarding Office Action have been provided drawn to:
(I) 103(a) rejections, which have been maintained for the reasons of record.

2. Claims 1-103 are pending in the case. Claims 1-40, 50, 52-55 and 67-93 are withdrawn from consideration as being directed to non-elected inventions and non-elected species.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 41-46, 48, 49, 51, 56, 57, 63-66 and 94-103 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Henry et al (US Patent No. 3,085,087) in view of Dearborn (US Patent No. 3,375,245) for the reasons disclosed on pages 2-4 of the Office Action filed October 3, 2007.

5. Applicant's arguments filed April 3, 2008 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Henry et al patent discloses chemically purified cotton linters, which are not high bulk density raw cotton linters. This argument is not persuasive since the secondary reference used to reject the instant claims, the Dearborn patent, shows that the density value of cotton linter recited in the instant claims is known in the art.

Applicants argue that the Dearborn patent does not teach or suggest to a person of ordinary skill in the art to use raw cotton linters as the starting material of the claimed process. This argument is not persuasive since the title of the Dearborn patent is a "method of making sodium carboxymethyl cellulose" which embraces the instant claims being drawn to a process for making a cellulose ether derivative and since the Dearborn patent does disclose cotton linter which has the instantly claimed bulk density. The rejection of Claims 41-46, 48, 49, 51, 56, 57, 63-66 and 94-103 under 35 U.S.C. 103(a) as being unpatentable over the Henry et al patent in view of the Dearborn patent is maintained for the reasons of record.

6. Claim 47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Henry et al patent in view of the Dearborn patent as applied to Claims 41-46, 48, 49, 51, 56, 57, 66 and 94-96 above, and further in view of the Savage (US Patent No. 2,949,452) for the reasons disclosed on pages 4 and 5 of the Office Action filed October 3, 2007.

7. Applicant's arguments filed April 3, 2008 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Savage

patent does not teach or suggest to a person having ordinary art to substitute the high bulk density raw cotton linters as disclosed by Applicants and provides no particular direction or motivation with regard to the cellulose source. The argument is not persuasive since the Savage patent is only cited to show that the preparation of cellulose ethers using cotton linters as the starting material (see column 2, 3rd paragraph) and organic amines as the base material (see column 2, line 26) is well known in the art. Accordingly, the rejection of Claim 47 under 35 U.S.C. 103(a) as being unpatentable over the Henry et al patent in view of the Dearborn patent as previously applied to claims above, and further in view of the Savage patent is maintained for the reasons of record.

8. Claims 58-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Henry et al patent in view of the Dearborn patent as applied to Claims 41-46, 48, 49, 51, 56, 57, 66 and 94-96 above, and further in view of Newbury et al (US Patent No. 6,069,355) for the reasons disclosed on pages 5 and 6 of the Office Action filed October 3, 2007.

9. Applicant's arguments filed April 3, 2008 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Newbury et al patent does not suggest that cellulose material of low viscosity can more thoroughly be mixed in a slurry which increases the quality of the final product. This statement in the rejection is withdrawn since the quality of the final product would depend on the application of the cellulose material. However, the rejection is maintained since the reduction of the viscosity of cellulose by irradiation, chemical treatment or enzymatic treatment is well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to reduced the cellulose material obtained from the process of the Henry et al patent in view of the Dearborn patent to a desired viscosity in view of the recognition in the art, as evidenced by the Newbury et al patent, that the techniques irradiation, chemical treatment and enzymatic treatment are effective in adjusting the range of degree of polymerization of cellulose products. Accordingly, the rejection of Claims 58-62 under 35 U.S.C. 103(a)

as being unpatentable over the Henry et al patent in view of the Dearborn patent as applied to Claims 41-46, 48, 49, 51, 56, 57, 66 and 94-96 above, and further in view of Newbury et al patent is maintained for the reasons of record.

***Reply to Final Must Include Cancellation of Claims Non-elected with Traverse***

10. This application contains Claims 1-40, 50, 52-55 and 67-93 drawn to an invention nonelected with traverse in the reply filed on November 15, 2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Summary***

11. Claims 41-49, 51, 56-66 and 94-103 are rejected; Claims 50, 52-55 and 67-93 are withdrawn from consideration as being readable upon non-elected species. Claims 1-40 are withdrawn from consideration as being drawn to non-elected inventions.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Examiner's Telephone Number, Fax Number, and Other Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Everett White/
Examiner, Art Unit 1623

/Shaojia Anna Jiang, Ph.D./
Supervisory Patent Examiner, Art Unit 1623